SSA FILES

#1 - DESIGNATION FILE:

a) Working File - copy of all originals
b) Originals - Petition, Action Memorandum, Support Document, FR Notice, FR Typesetting Rquest, Communication Plan, Map.
c) Correspondence - Executive corresponce dealing directly with designation. (All other correspondence is support information)
d) Fact Sheets
e) Federal Register Notices
f) Maps
g) Draft copies of Petition/Support Document (not in all)
h) Obsolete Documentation (not in all)

#2 - SUPPORT FILE:

a) Reports
b) Calculations
c) Telephone Records
d) Correspondence (anything not included in 1c)
e) Petition Signatures
f) Level B Studies

#3 - PUBLIC COMMENT:

a) Hearing Information & Transcripts
b) Written Comments from Public
c) News Clipping & Releases

#4 - POST DESIGNATION:

a) Project Reviews
b) Office Visits to Area - Reports
c) Objections to Designation

Nassau-Suffolk Counties, New York

Background Document
in support of the
Issue Memorandum
concerning section 1424(e)
of the Safe Drinking
Water Act

AWT

Table of Contents

BACKGROUND DOCUMENT

Introduction

The Safe Drinking Water Act, Public Law 93-523, of December 16, 1974 contains a provision in section 1424(e), which states that:

> (e) If the Administrator determines, on his own initiative or upon petition, that an area has an aquifer which is the sole or principal drinking water source for the area and which, if contaminated, would create significant hazard to public health, he shall publish notice of that determination in the Federal Register. After the publication of any such notice, no commitment for Federal financial assistance (through a grant, contract, loan guarantee, or otherwise) may be entered into for any project which the Administrator determines may contaminate such aquifer through a recharge zone so as to create a significant hazard to public health, but a commitment for Federal financial assistance may, if authorized under another provision of law, be entered into to plan or design the project to assure that it will not so contaminate the aquifer.

This section allows for the specific designation of areas which are dependent upon ground-water supplies. Following designation, the review process will insure that federal agencies will not commit funds toward projects which may contaminate these ground-water supplies.

Receipt of Petition

On January 21, 1975, the Environmental Defense Fund petitioned the EPA Administrator to designate the aquifers underlying Nassau and Suffolk Counties, Long Island, New York, as a sole source aquifer under the provisions of the Act (Attachment 1). A notice of receipt of this petition, together with a request for comments, was published in the Federal Register, Thursday, June 12, 1975 (Attachment 2).

Area of Consideration

Although the Long Island aquifer system underlies all of Nassau, Suffolk, Kings and Queens Counties, the Administrator has limited

consideration of designation to Nassau and Suffolk Counties because the petition is limited to the ground water underlying Nassau and Suffok Counties, because New York City is supplied almost completely with potable water from upstate New York, and because ground-water movement is primarily north-south so that ground water underlying New York City does not impact upon the ground water underlying Nassau and Suffolk Counties except for that area of Queens County that is adjacent to the western border of Nassau County.

The remainder of this report presents the relevant facts on the issue.

Long Island Aquifer

I Geologic Setting

The Long Island aquifer system is located in Long Island, New York, and lies within the Atlantic Coastal Plain physiographic province of the United States.

Long Island is bounded on the north by Long Island Sound, on the east and south by the Atlantic Ocean and on the west by New York Bay and the East River (Figure 1). The island is 193 kilometers (120 miles) long and 37 kilometers (23 miles) wide. Including the barrier beach and other outlying islands, its area is approximately 3600 square kilometers (1,400 square miles).

Long Island's present configuration is primarily the result of the glaciation which occurred during the Pleistocene Era, predominatly that of the last ice age, the Wisconsin, which ended about ten thousand years ago.

There are four major physiographic features, the terminal moraines, the glacial outwash plain, eroded headlands, and the barrier beaches:

1. Two terminal moraines are located in the north and central parts of the island. The northern, the Harbor Hill moraine, continues eastward into the North Fork of the island, while the southern, the Ronkonkoma moraine, continues eastward into the South Fork. The western reaches of the two moraines converge. On the northern flanks of the moraines are their respective ground moraines. The Harbor Hill moraine has a maximum altitude (height above sea level) of 90 meters (300 feet).

The Ronkonkoma moraine has a maximum altitude of 120 meters (400 feet). The intermorainal area is from 30-60 meters (100-200 feet) in altitude.

2. South of the Ronkonkoma terminal moraine is a moderately flat glacial outwash plain that extends to the south shore bays. It ranges in altitude from 30 to 46 meters (100 to 150 feet) just south of the moraine to zero at the coast, with a 3.8 meter/kilometer (20 foot/mile) slope seaward. At the coast it merges with Recent (Holocene) lagoon deposits.

3. Eroded headlands along the north shore are the result of various glacial and post-glacial depositional and erosional processes. The relatively wide deep harbors of the western half of the north shore of the island were probably occupied by the last ice-block remnants of the stagnating Pleistocene ice sheet. In places, bluffs steepened by wave erosion are about 30 meters (100 feet) high.

4. Along the south shore, separated by shallow bays from the main part of the island, are barrier beaches or offshore bars created by wave and ocean currents. They are constantly eroded by a predominantly west-directional longshore current. The shallow bays are gradually filling naturally with sand, silt and organic matter.

The geologic structure of Long Island is relatively uniform. The island is underlain by bedrock of the Precambrian system or Proterozoic Era, composed of crystalline metamorphic and igneous rock with a southeast slope of approximately 12 meters per kilometer (65 feet per mile) or slightly less than 1^{o}. Lying over bedrock is a wedge-shaped mass of unconsolidated material. The wedge of unconsolidated sediments ranges in thickness from zero where the bedrock surfaces near the East River to 340 meters (1,100 feet) in the southeast part of Queens County and to 610 meters (2,000 feet) in south-central Suffolk County.

Two advances of the Wisconsin ice sheet during the Upper Pleistocene of the Quaternary Period caused the island to be blanketed with till, ice-contact stratified drift, outwash deposits and deposits composed of clay, silt, sand, gravel and boulders. The terminal moraines and the north shore are composed primarily of stratified drift with some till. The areas between the moraines and south of them are mostly the outwash deposits. Central and south Long Island are of glaciofluvial origin.

II Occurrence of Ground Water

There are four distinct water-yielding zones on Long Island: The Upper Glacial, the Jameco, the Magothy and the Lloyd aquifers. They all occur in the unconsolidated materials overlying the bedrock (Figure 2).

The Upper Glacial aquifer, which underlies all of Nassau and Suffolk Counties, has a probable maximum thickness of about 200 meters (700 feet). It contains large quantities of ground water in both the outwash plain and the morainal deposits. The deposits underlying the outwash plain are composed largely of stratified, brown, fine to coarse sand and gravel.

The Jameco aquifer, a lower glacial deposit which exists locally along the northern and southern parts of Nassau County, ranges in thickness from zero to about 60 meters (200 feet) and is situated from about 30 to 170 meters (100 to 550 feet) below land surface. It contains dark grey and brown, fine to coarse sand and gravel with thin silt and clay layers. This aquifer is locally contaminated by saltwater intrusion.

The Magothy aquifer, which underlies both Nassau and Suffolk Counties, ranges from zero to 335 meters (zero to 1,100 feet) thick and is zero-180 meters (zero-600 feet) below the land surface. Fine to medium sand is interbedded with clay and sandy clay of moderate permeability and silt and clay of low to very low permeability. The basal 15-61 meters (50-200 feet) may commonly contain coarse sand and gravel.

The Lloyd aquifer, which lies immediately above solid bedrock, is approximately zero-170 meters (zero-550 feet) thick and is 60-550 meters (200-1,800 feet) below the surface. It contains fine to coarse sand and gravel with a clayey matrix with some layers of silty or solid clay.

Very scanty information indicates that the Lloyd aquifer and the deep Magothy aquifer contain salty ground water beneath the forks at the eastern end of Long Island. The fresh ground water occurs in a lens ranging in thickness from a few meters to greater than a hundred meters.

III Ground-water Movement

The entire ground-water reservoir except for that underlying the two eastern forks may be regarded as a single hydraulic system in which the more permeable zones, which yield useable amounts of water to wells, are termed aquifers

and the less permeable, which retard the movement of ground water, are termed confining beds.

On Long Island the fresh ground water is bounded laterally and underlain locally by salty ground water hydraulically connected to the sea. The salt-water interface is known accurately only in southwest Nassau and southeast Queens counties.

Figure 3 depicts the general direction of ground-water movement. The predominant flow pattern is northward and southward from the water table divide. (Figure 4). The approximate time for water near the Nassau-Suffolk County border to move from the water table near the divide to points within the regional ground-water system is also shown in Figure 4.

IV Ground-water Recharge

Under natural conditions the ultimate source of the ground-water recharge is infiltration of precipitation into the zone of aeration and subsequent downward percolation through the zone of aeration to the water table. Estimates of annual recharge range from about 250-890 millimeters (10 to 35 inches) of water, with an estimated average of 560-580 millimeters (22-23 inches) of water or about one-half of the average annual precipitation. This corresponds to about 17 liters per second per square kilometer (one million gallons per day per square mile). It is probably less in the northern part of the island and higher in the outwash plains.

The ground-water reservoir, exclusive of the eastern forks, may be regarded as a single hydraulic system. The freshwater reservoir is bounded by the saltwater interfaces in the various aquifers to the north, south, east and west, the water table above, and the bedrock below. It is estimated that about 40-75 trillion liters (10-20 trillion gallons) of water could be obtained if the aquifers were drained. (This excludes the North and South Forks).

In the past two decades, most new housing developments have been required to include construction of one or more recharge basins. Most of the highway drainage is also collected in this way. These basins probably compensate for some of the lost permeable area.

Since 1933 New York State has been empowered to regulate all wells on Long Island that withdraw more than 378,500 l/day (100,000 gpd) from the ground-water reservoir. In 1954 the law was modified to include all wells having

capacities of more than 2.8 l/sec (45 gpm) or 246.025 l/day (65,000 gpd). The State policy has been that the drilling of new industrial wells for air conditioning or cooling water purposes with capacities in excess of 378 l/day (100,000 gpd) be prohibited unless the water pumped is returned in a chemically uncontaminated condition into the ground through diffusion wells or other approved structures. There are more than 1000 such wells in Long Island, including King and Queens Counties. Most of the water has been used for air conditioning and then been recharged at higher temperatures. The wells vary in depth from 3 to 6 meters especially in the older wells, to a hundred meters or more. Water used for other industrial purposes need not be returned but can be discharged with State and Federal approval. In addition, under the State Pollutant Discharge Elimination System a permit is required for any ground-water discharge in excess of 3785 liters per day (1000 gallons per day).

V Ground-water Discharge

The main elements of natural discharge from the aquifers are evapotranspiration, seepage to streams and springs, and subsurface outflow.

Losses from the zone of saturation through evaporation and transpiration vary seasonally and depend in large degree on the position of the water table with respect to the land surface.

It appears that stream flow is not appreciably derived from direct runoff under natural conditions. Less than five percent of total measured stream flow is direct runoff, about one percent of the precipitation. The remaining 95 percent is supplied by ground water.

IV Water Supplies Nassau and Suffolk Counties

In Nassau County the community water supply is provided by 37 municipally or publicly owned systems, five privately owned systems and three institutional systems. The water for these systems comes from 474 operating wells. Out of a total population of 1,530,629, about 3,000 relied on individual sources, and 1,419,789 people relied on the community water supplies. This last figure includes a transient school population of 16,000. It does not include 123,840 people served by the Jamaica Water Company of New York City.

In Suffolk County, the community water is provided by the Suffolk County Water Authority, 19 municipal water districts, village-owned water systems and 56 individually owned water corporations. In mid-1969 there were 523 operating community supply wells and pumping stations. Large areas are still without a community water supply. In 1965, of a total estimated population of 893,000, more than 260,000 people still had to reply on individual sources.

VII Water Quality

The natural water quality of the aquifers is generally good, except for iron. The dissolved solids concentration is very low, about 40 to 50 mg/l, varying with aquifer. Locally the iron content of the waters of the Magothy and Lloyd aquifers is about two to five times higher than the 0.3 mg/l recommended for public water supply.

During recent years ground-water quality has deteriorated. The major problems are nitrate and detergents. Also, local problems of saltwater intrusion and thermal and industrial waste pollution have contributed to the deterioration. Because of the use of septic tanks, organics present in detergents have entered the aquifers, especially the Upper Glacial aquifer. Although perhaps not a health problem, detergent residues do cause effects which are not aesthetically pleasing, such as foaming. Suffolk County has banned the sale of detergents for several years. Test wells show decreasing amounts of detergents but not to a level where Suffolk County would consider removing the ban.

Perhaps the greatest problem of ground-water contamination in Long Island is by nitrate. The increased nitrate content of ground water and streams, mainly due to infiltration of sewage and leachate from chemical fertilizers, is a major water qulity problem in Nassau County. Approximately 35 percent of the 426 water supply wells located throughout Nassau County have shown the trend of increasing nitrate concentrations. In 1973, 25 wells exceeded the state standard for drinking water of 10 mg/l nitrate as N. Since 1967, 30 wells have been closed because of the same water quality problem.

The Suffolk County Water Authority has indicated that nitrate concentrations have been increasing in some Suffolk County public supply wells, but that at present none have been abandoned because of nitrate levels exceeding the public health standard. Although the problem is less severe in this more sparsely populated county, parallel trends of development indicate that nitrate contamination will approach that of Nassau County in the future. Potential serious water supply problems exist on the North and South Forks of Long Island. At these locations, available supply is extracted only from shallow wells which tap fresh water underlain by salt water. No deep Magothy source exists at these locations.

While ocean discharge of wastewater reduces direct contamination of the aquifer, it increases the consumptive use and may result in saltwater intrusion. Saltwater intrusion so far is largely a local problem in a small area on the southern

Queens-Nassau County border and near the north shore in Nassau County. The North Fork also has experienced intrusion due to its high consumptive use, mainly because of agricultural use.

VIII Areawide Waste Management Planning (208)

Ground-water management is being addressed locally through areawide waste management planning. The Nassau-Suffolk Regional Planning Board (NSRPB) is the agency designated to develop an Areawide Waste Treatment Management Plan for Nassau and Suffolk Counties. Although the NSRPB is the designated agency, the 208 program represents a joint effort of the NSRPB and various operating agencies in Nassau and Suffolk Counties. The Suffolk County Water Authority, Health Department and Department of Environmental Control as well as the Nassau County Department of Planning Health and Public Works are voting members of the Technical Advisory Committee. The New York State Department of Environmental Conservation and the EPA are also represented.

Preliminary results from the 208 planning are that all population projections indicate an expanding population in Nassau and Suffolk Counties with increased ground-water use and increased wastewater discharges.

Major surface and ground-water pollution problems have been identified on Long Island. One of the goals of the 208 planning process in the bicounty region is to develop and implement a plan for water management which satisfies both surface and ground-water quality objectives in a cost effective manner while distributing current and future costs and benefits on an equitable basis. Alternative water supplies such as water from upstate New York or desalinization will be examined.

Mr. John Hanna, General Counsel
Department of Environmental Conservation

Mr. Robert Cooke
Regional Administrator
Department of Environmental Conservation
Stony Brook, New York

Mr. John V. N. Klein
Suffolk County Executive

Mr. Ralph Caso
Nassau County Executive

Mr. Lee E. Koppelman, Executive Director
Bi-County Planning Commission

Figure 1
LOCATION AND GENERAL GEOGRAPHIC FEATURES OF LONG ISLAND, NEW YORK

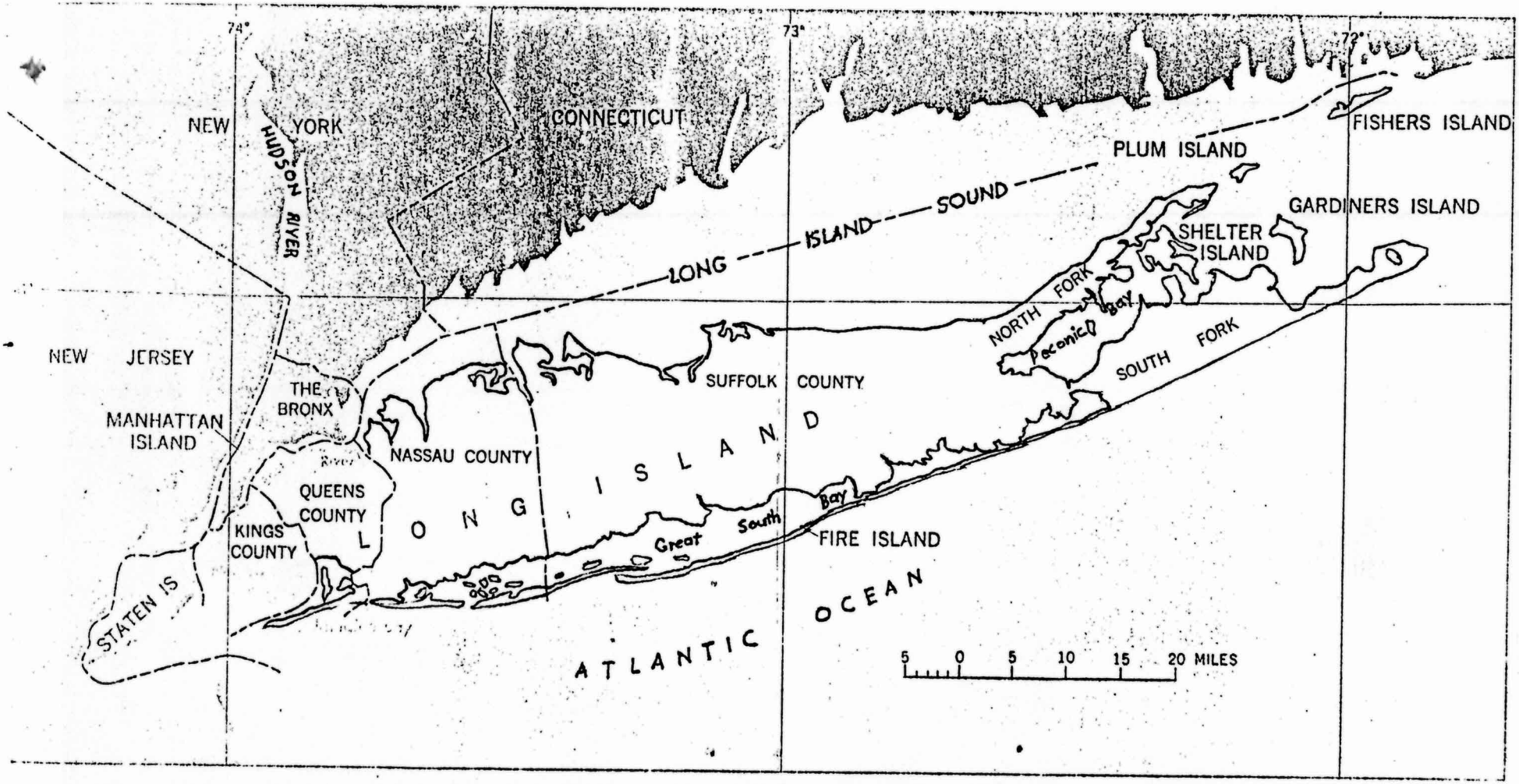
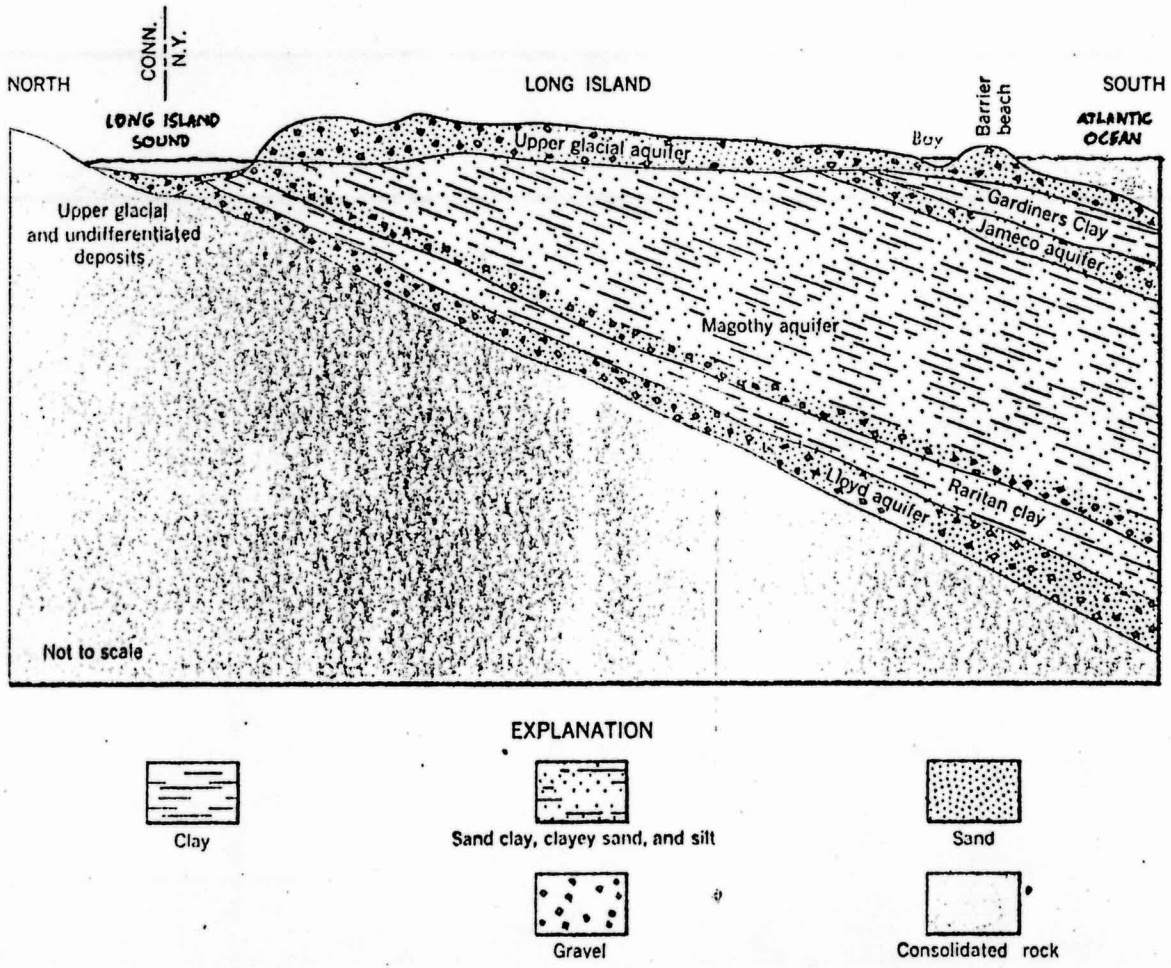


Fig 2.

Figure 2
MAJOR HYDROGEOLOGIC UNITS OF THE GROUND-WATER RESERVOIR OF LONG ISLAND, NEW YORK



EXPLANATION

TYPES OF GROUND WATER DISCHARGE

1 Seepage to streams
2 Subsurface outflow
3 Evapotranspiration
4 Spring flow

General movement of fresh ground water

Fresh ground water

Salty ground water

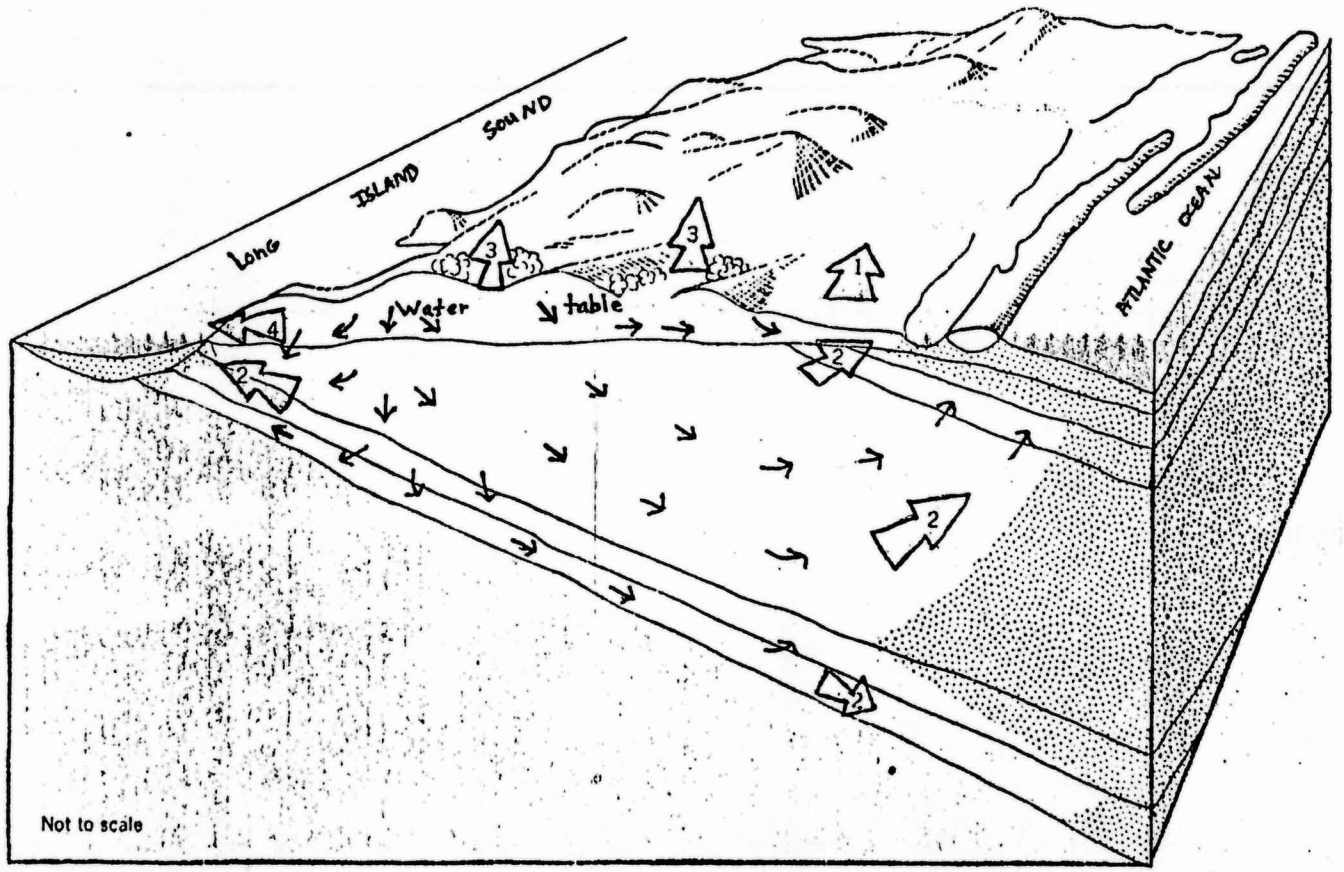


Figure 3 alter 1
GROUND-WATER MOVEMENT AND DISCHARGE ON LONG ISLAND, NEW YORK, UNDER NATURAL CONDITIONS

Figure 4

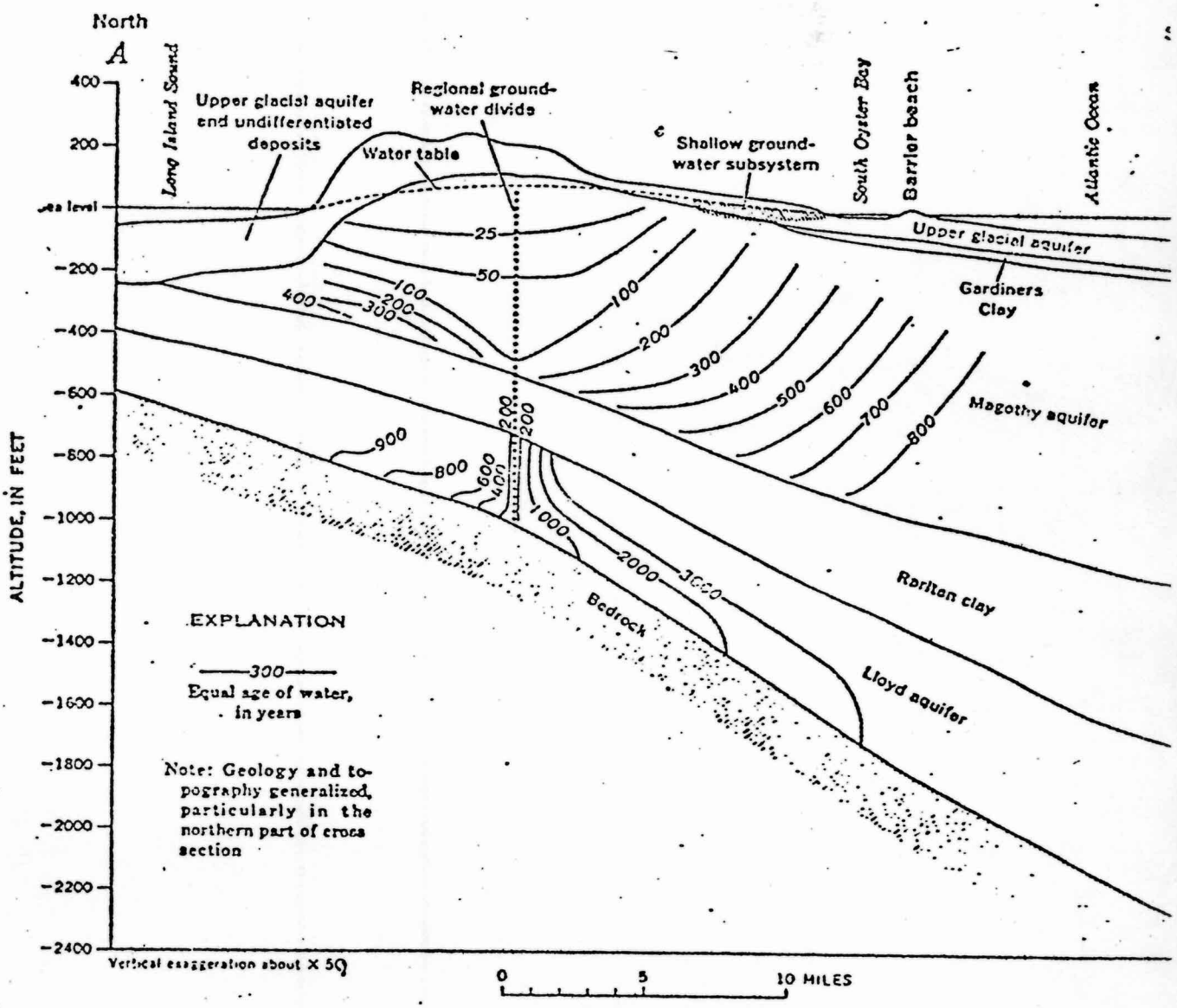


Figure 12. Approximate time required for water to move from the water table to points within the regional groundwater system of Long Island. The section shown is slightly east of the Nassau-Suffolk County border. Source: O. L. Franke and P. Cohen, "Regional Rates of Ground-Water Movement on Long Island, New York," USGS Prof. Paper 800-C (Washington, D.C.: U.S. Geological Survey, 1972).

Figure 2. Major Hydrogeolgic Units of the Ground Water Reservoir of Long Island, New York

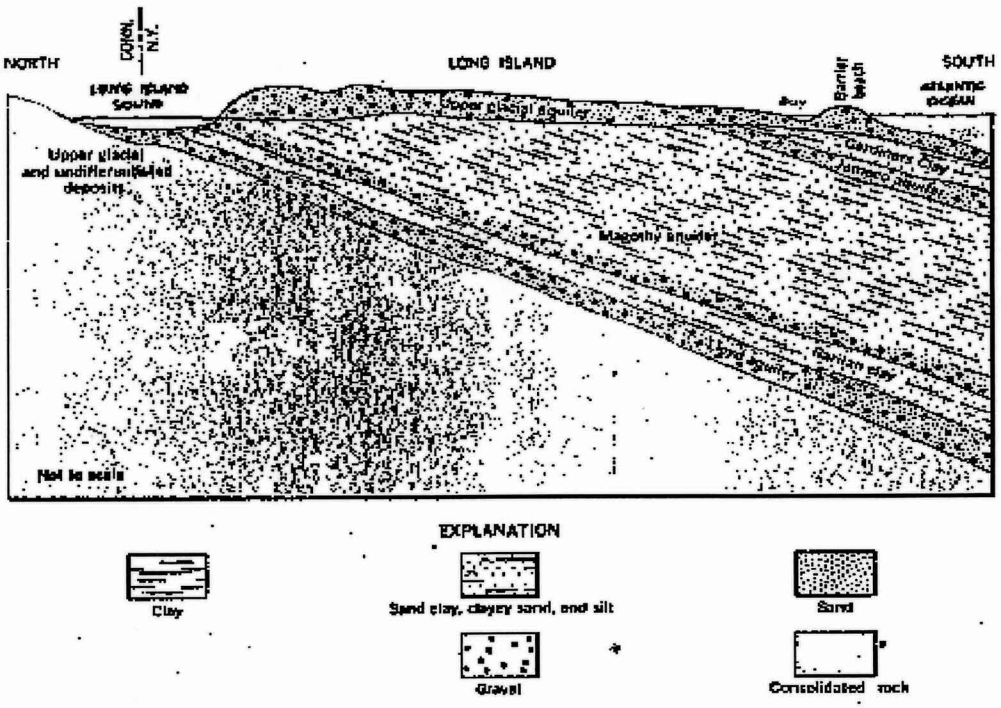
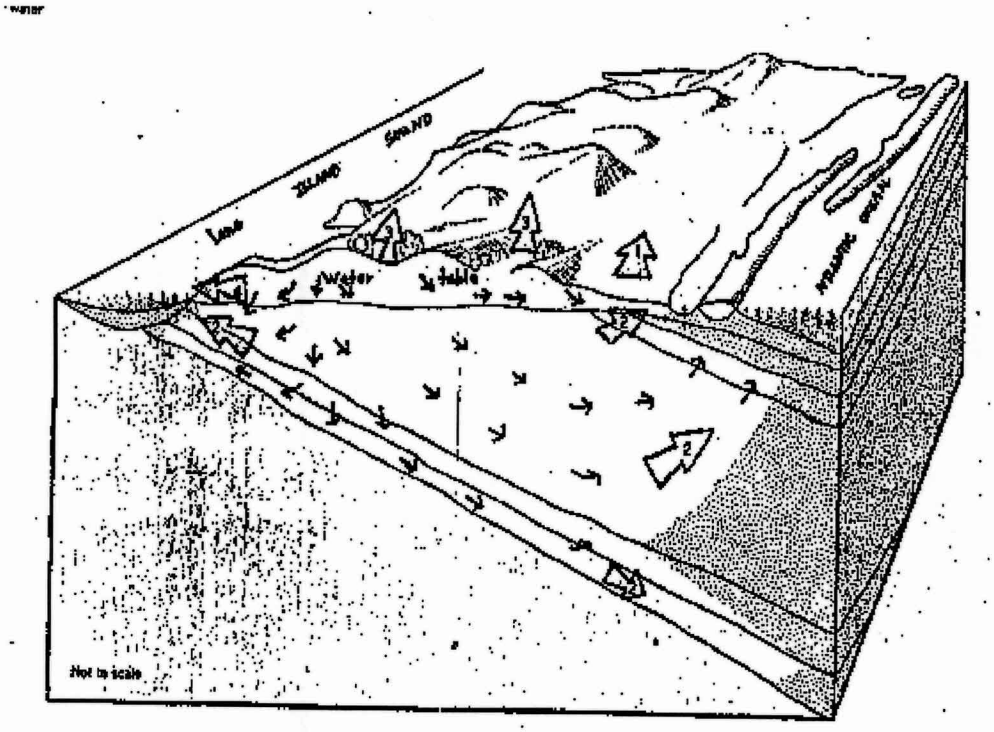


Figure 3. Ground Water Movement and Discharge on Long Island, New York, Under Natural Conditions



FR 40 - No. 114 Thurs. June 12, 1975

[FRL 379–5]

NASSAU AND SUFFOLK COUNTIES, LONG ISLAND, NEW YORK

Proposal on EPA Determination Regarding Aquifers

On March 6, 1975, the Environmental Protection Agency published a notice in the FEDERAL REGISTER (40 FR 10514) that it had received a petition, pursuant to section 1424(e) of the Public Health Service Act, as amended by the Safe Drinking Water Act, Pub. L. 93–523, to make a determination that the Edwards Aquifer is the sole or principal drinking water source for the San Antonio area which, if contaminated, would create a significant hazard to public health.

A petition has been submitted, on behalf of the Environmental Defense Fund, requesting the Administrator of the Environmental Protection Agency to make a similar determination with respect to the aquifers underlying Nassau and Suffolk Counties. This petition is reprinted in full below:

BEFORE THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Russell E. Train, Administrator

In the Matter of the Petition of the Environmental Defense Fund, Inc. Under Section 1424(e) of the 1974 Water Supply Act with Respect to the Aquifers of Nassau and Suffolk Counties, New York.

PETITION

1. Section 1424(e) of the 1974 Water Supply Act provides as follows:

(e) If the Administrator determines, on his own initiative or upon petition, that an area has an aquifer which is the sole or principal drinking water source for the area and which, if contaminated, would create a significant hazard to public health, he shall publish notice of that determination in the FEDERAL REGISTER. After the publication of any such notice, no commitment for Federal financial assistance (through a grant, contract, loan guarantee, or otherwise) may be entered into for any project which the Administrator determines may contaminate such aquifer through a recharge zone so as to create a significant hazard to public health, but a commitment for Federal financial assistance may, if authorized under another provision of law, be entered into to plan or design the project to assure that it will not so contaminate the aquifer.

2. The aquifers which underlie Nassau and Suffolk Counties, New York, a standard statistical metropolitan area, are the sole water source for this area. Numerous publications by federal agencies, including "An Atlas of Long Island's Water Resources," New York Water Resources Commission Bulletin 62, by Phillip Cohen, O. L. Franke and B. L. Foxworthy, Hydrologists, United States Geological Survey (in particular p. 70) and the Environmental Impact Statement entitled "Environmental Impact Statement on Waste Treatment Facilities Construction Grants for Nassau and Suffolk Counties, New York (the "EIS"), p. 50–51, prepared by the U.S. Environmental Protection Agency in July 1972 establish this fact.

3. Nassau County has a population of approximately 1.45 million people according to the 1970 census. At the time of the census, Suffolk County had a population of about 1.13 million, but has been growing rapidly since that time. The latest population figure for Suffolk County is 1,256,216. The population of Suffolk County, which in terms of land area takes up almost two thirds of Long Island, is gradually spreading eastward.

4. Nassau and Suffolk Counties have three principal aquifers, the Glacial Aquifer (the top aquifer), the Magothy Aquifer and the Lloyd Aquifer. The top two aquifers, the Glacial and Magothy Aquifer are the principal sources of water for the residents of Nassau and Suffolk Counties.

5. Since these aquifers are the sole source of drinking water for Nassau and Suffolk Counties, contamination of these aquifers could create a significant hazard to public health.

6. That contamination of the Glacial Aquifer is already a problem is evident from the EIS itself. Numerous U.S. Geological Survey and Nassau and Suffolk County Reports substantiate this contamination problem. Indeed, the expenditure of hundreds of millions of dollars of EPA grant money to fund huge coastal treatment plants with outfalls described in the EIS is evidence of this contamination problem.

7. Finally, the two counties, Nassau and Suffolk, are filing a joint application to designate the Bi-County Planning Commission as a section 208 local planning organization under section 208 of the 1972 Federal Water Pollution Control Act Amendments in recognition of the fact that the two Counties are an area "which has substantial water quality control problems."

8. Therefore, we request that you determine that Nassau and Suffolk Counties have aquifers which are "the sole or principal drinking water source for the area and which, if contaminated, would create a significant hazard to public health, * * *" and that you therefore publish notice of this determination in the FEDERAL REGISTER.

Respectfully submitted,

JAMES T. B. TRIPP,
Counsel, Environmental Defense Fund, Inc., 162 Old Town Road, East Setauket, New York 11733.

East Setauket, New York
JANUARY 21, 1975.

EPA intends to decide whether to make the requested determination at the earliest time consistent with a complete review of the relevant data and information, and a full opportunity for public participation. In this regard, the Agency is developing a full factual record, and solicits comments, data, and references to additional sources of information relevant to the determination required by section 1424(e). In particular, information is sought concerning whether or not the underground water body or bodies underlying Nassau and Suffolk Counties are a single aquifer, or are two or more separate, distinct aquifers. Information is further sought concerning the geographical boundaries and other characteristics of the aquifer or aquifers and their recharge zones, the area or areas dependent upon them for drinking water, the significance of current or anticipated threats to public health that might result from contamination of the aquifers, and the prospects that such contamination will occur as a result of current activities or events that must be anticipated.

Comments, data, and references in response to this notice should be submitted in writing to the Regional Administrator, Region II, Environmental Protection Agency, 26 Federal Plaza, [illegible] 1009, New York, N.Y. 10007 [illegible] days. Information which is [illegible] the Agency concerning the [illegible] underlying Nassau and Suffolk Counties will be available for inspection at the address listed above.

Dated: June 6, 1975.

RUSSELL E. TRAIN,
Administrator.

[FR Doc.75–15279 Filed 6–11–75;8:45 am]

of NPDES permits to federal agencies and instrumentalities. As a result of amendments in the Clean Water Act of 1977 (CWA) this restriction has been eliminated. The DEQ has applied for a modification of EPA's approval of the State of Oregon permitting authority to include the issuance of NPDES permits to federal agencies and instrumentalities. In addition, certain changes in the Memorandum of Agreement between the Director of DEQ and the Regional Administrator of EPA, which was approved as part of the previous program authorization, have been proposed. The most significant changes in the Memorandum of Agreement involve procedures for EPA review of proposed NPDES permits for certain classes and categories of dischargers, and procedures for coordination of DEQ and EPA compliance monitoring and enforcement activities.

2. REQUIREMENTS OF THE CLEAN WATER ACT RELATING TO REQUESTS FOR NPDES PERMITTING AUTHORITY

Section 402(b) of the Clean Water Act, 33 USC § 1342(b), provides that a state agency applying for authority to conduct an NPDES program must have authority to issue permits which assure compliance with certain other sections of the Clean Water Act, which meet certain requirements concerning surveillance and monitoring of waste water discharges, and which insure that the public receives notice of each application for a permit. In addition, the state agency must have the authority to abate violations of the permit of the permit program, including civil and criminal penalties and other methods of enforcement, and to assure that any industrial user of any publicly owned treatment works will comply with certain sections of the Act. A complete description of such requirements is contained in Section 402(b) of the CWA, 33 USC § 1342(b), and in Title 40, Code of Federal Regulations, Part 124.

3. PUBLIC COMMENTS

By this Notice the Environmental Protection Agency invites written public comment on DEQ's request for approval of its authority to conduct a NPDES permitting program for federal agencies and instrumentalities and on proposed changes to the Memorandum of Agreement. This comment period will end 30 days after the date of this Notice. EPA does not intend to hold a public hearing concerning this matter unless there appears to be sufficient public interest. DEQ's request and supporting documents can be inspected during regular business hours at the EPA Oregon Operations Office at 522 S.W., 5th Avenue, Portland, Oregon, and in the EPA Seattle Office (Water Compliance and Permits Branch), at 1200 Sixth Avenue, Seattle, Washington. Any written comments concerning the potential approval of this modification of DEQ's NPDES permitting authority may be sent to the Water Compliance and Permits Branch at the EPA address above. All comments will be available for public inspection and copying.

4. FINAL DETERMINATION

A final determination and decision whether to approve DEQ's authority to issue NPDES permits for federal agencies and instrumentalities and to make changes in the Memorandum of Agreement, will be made by EPA's Administrator in Washington, D.C. All comments received concerning DEQ's request will be forwarded to the EPA Headquarters Office. The decision whether to approve or disapprove the proposed modification authority is expected no later than August 19, 1978.

Dated: June 9, 1978.

DONALD P. DUBOIS,
Regional Administrator,
Region X.

[FR Doc. 78-17069 Filed 6-20-78; 8:45 am]

[6560-01]

[FRL 910-3]

AQUIFERS UNDERLYING NASSAU AND SUFFOLK COUNTIES, NEW YORK

Determination

Notice is hereby given that pursuant to Section 1424(e) of the Safe Drinking Water Act (42 U.S.C. 300f, 300h-3(e); 88 Stat. 1660 et seq.; Pub. L. 93-523) the Administrator of the Environmental Protection Agency has determined that the aquifer system underlying Nassau and Suffolk Counties, Long Island, New York, is the principal source of drinking water for these counties and that, if the aquifer system were contaminated, it would create a significant hazard to public health.

BACKGROUND

The Safe Drinking Water Act was enacted on December 16, 1974. Section 1424(e) of the Act states: "If the Administrator determines, on his own initiative or upon petition, that an area has an aquifer which is the sole of principal drinking water source for the area and which, if contaminated, would create a significant hazard to public health, he shall publish notice of that determination in the FEDERAL REGISTER. After the publication of any such notice, no commitment for Federal financial assistance (through a grant, contract, loan guarantee, or otherwise) may be entered into for any project which the Administrator determines may contaminate such aquifer through a recharge zone so as to create a significant hazard to public health but a commitment for Federal financial assistance may, if authorized under another provision of law, be entered into to plan or design the project to assure that it will not so contaminate the aquifer."

On January 21, 1975, the Environmental Defense Fund petitioned the Administrator to designate the aquifers underlying Nassau and Suffolk Counties, Long Island, New York, as a sole source aquifer under the provisions of the Act. A notice of receipt of this petition, together with a request for comments, was published in the FEDERAL REGISTER, Thursday, June 12, 1975. Written comments were submitted by the Environmental Defense Fund (EDF) on August 7, 1975, supporting their petition. A letter from the Director of the Nassau-Suffolk Regional Planning Board, dated October 1, 1976, requested that designation be delayed until after the completion of the areawide waste management (208) planning process for Long Island.

Because of the limited response to the FEDERAL REGISTER notice, EPA issued a press release and mailed an information sheet to elected officials and environmental groups on Long Island in March 1977. In addition, a presentation was made to the Citizens Advisory Committee (CAC) of the 208 planning agency and to the executive committee of the Long Island Water Conference. In response to these activities EPA received three comments: a letter from EDF questioning why project review would exclude direct Federal projects, a letter from a member of the East Hampton Planning Board expressing support for the designation, and a letter from the CAC requesting that designation be delayed until after the completion and approval of the Long Island 208 plan.

In considering the comments received, we could not agree with the letters requesting further delay since we do not believe that the review process under Section 1424(e) will constrain the options of 208 planning.

On the basis of the information which is available to this Agency, the Administrator has made the following findings, which are the basis for the determination noted above:

(1) The aquifers underlying Nassau and Suffolk Counties are the sole or principal drinking water source for the area. They supply good quality water for about 2.5 million people. Current water supply treatment practice for public supplies is generally limited to disinfection for drinking purposes, with some plants capable of nitrate removal. There are also numerous private sources. There is no alternative source of drinking water supply which could economically replace this aquifer system.